

Figure 1

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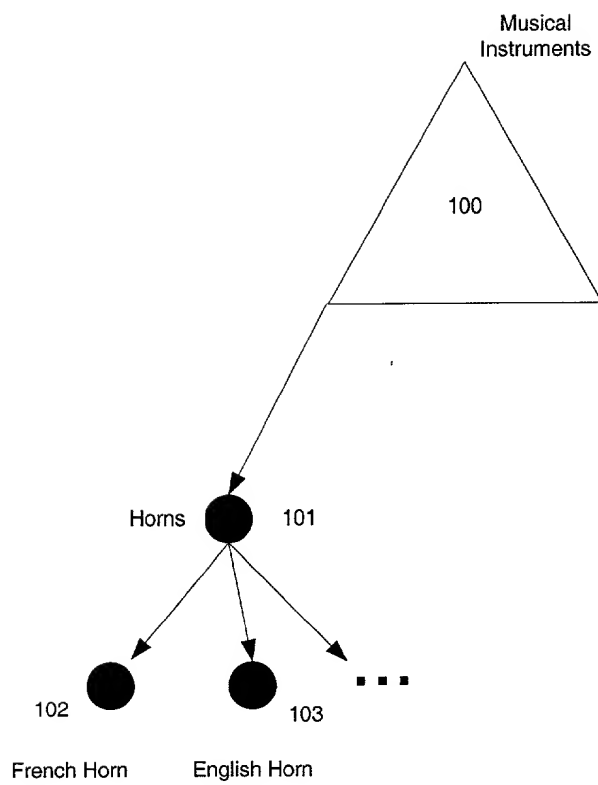


Figure 2

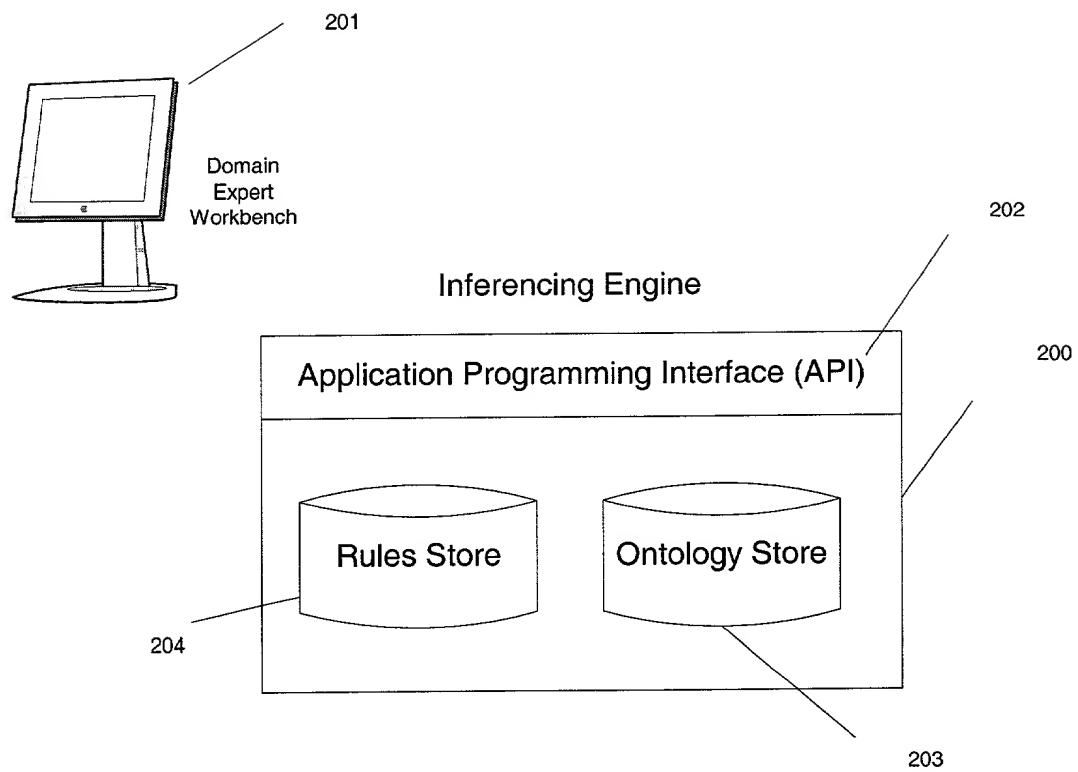


Figure 3

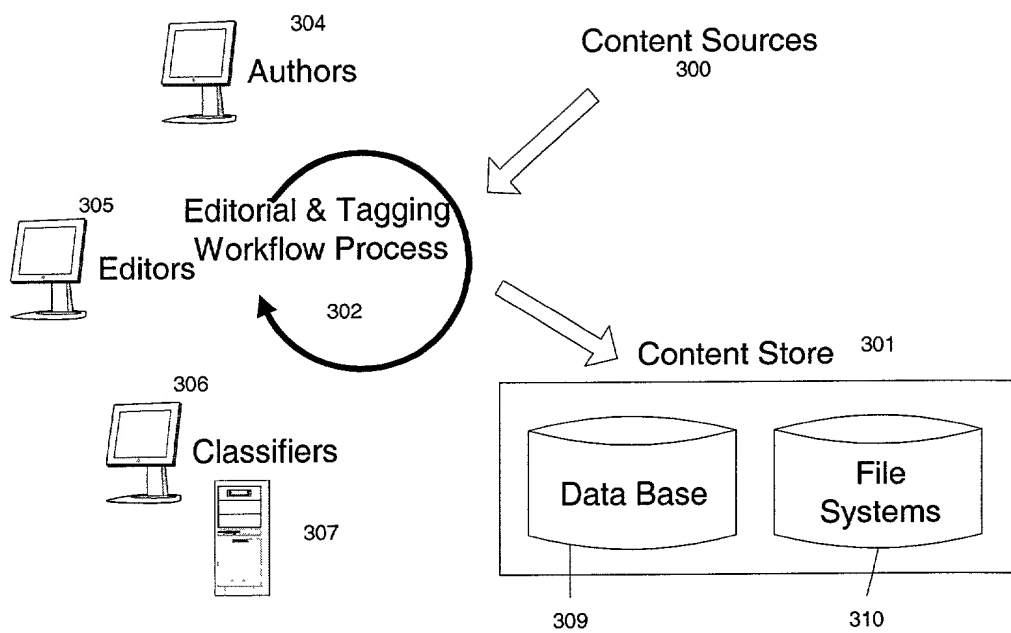


Figure 4

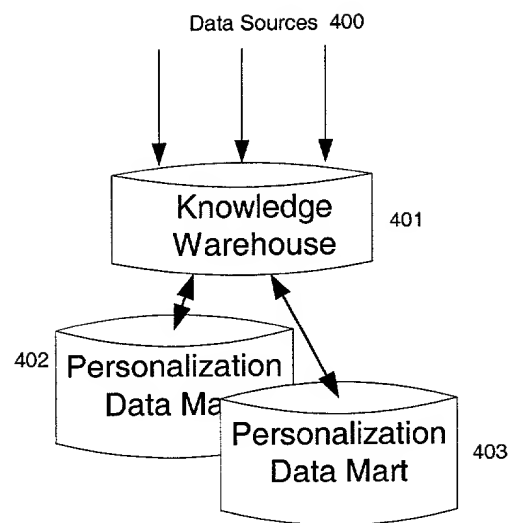


Figure 5

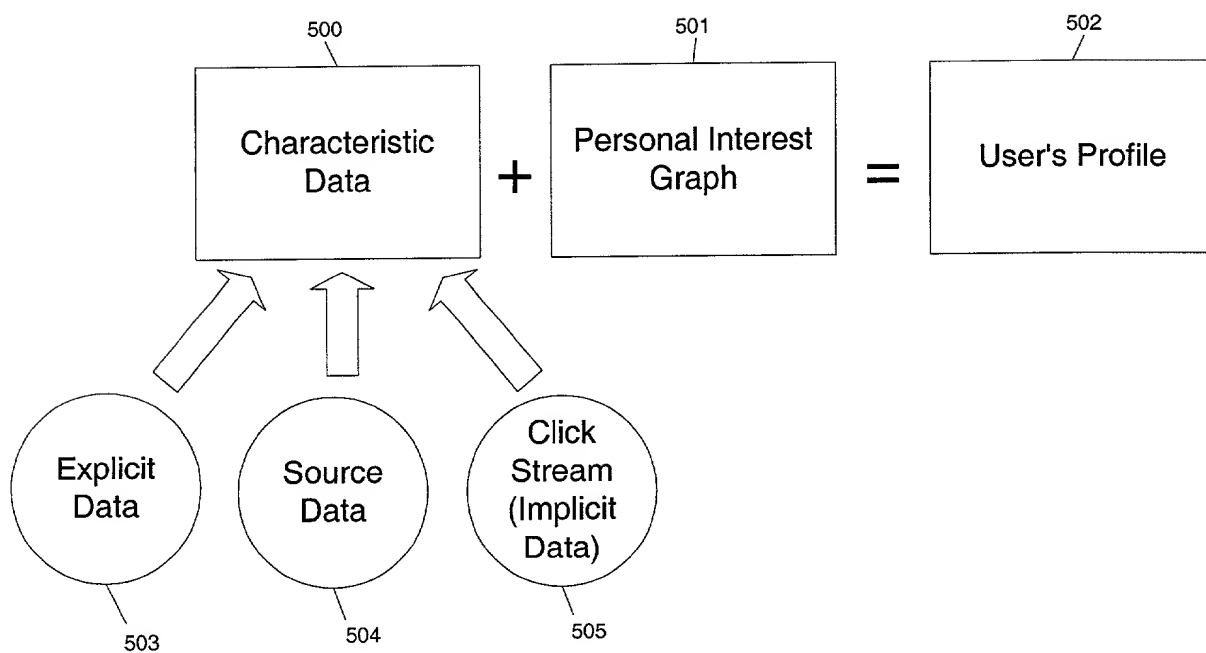


Figure 6

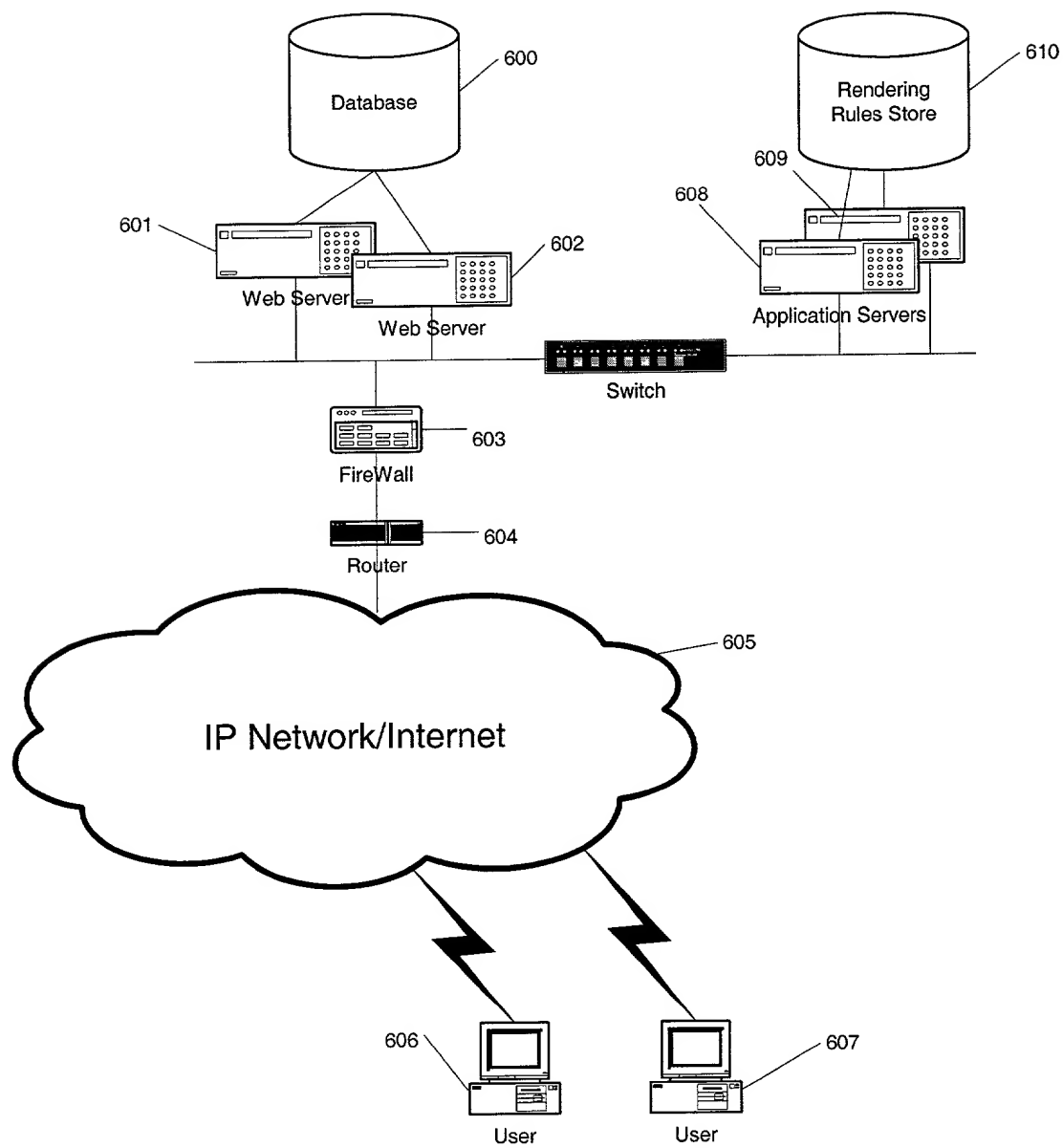


Figure 7

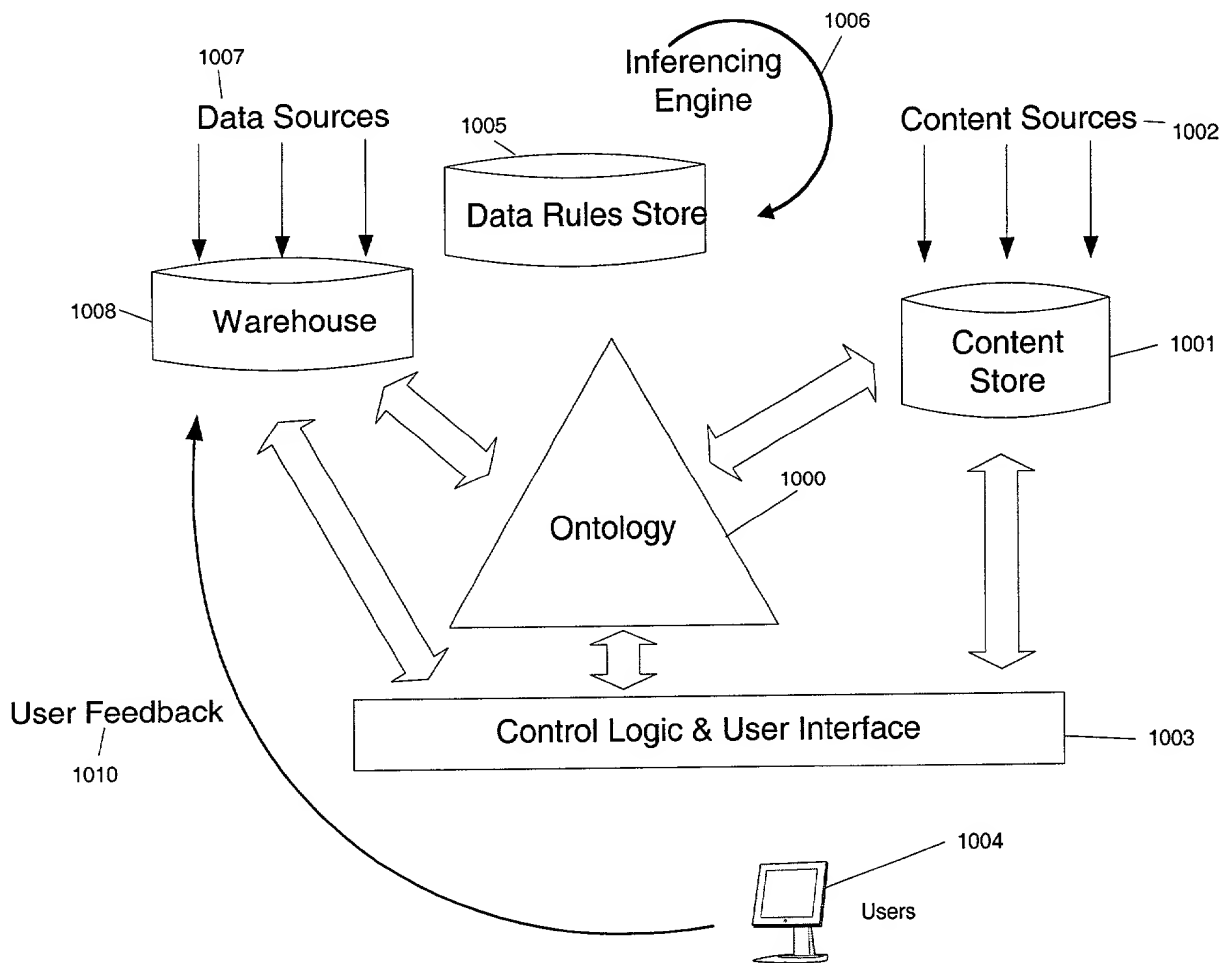


Figure 8

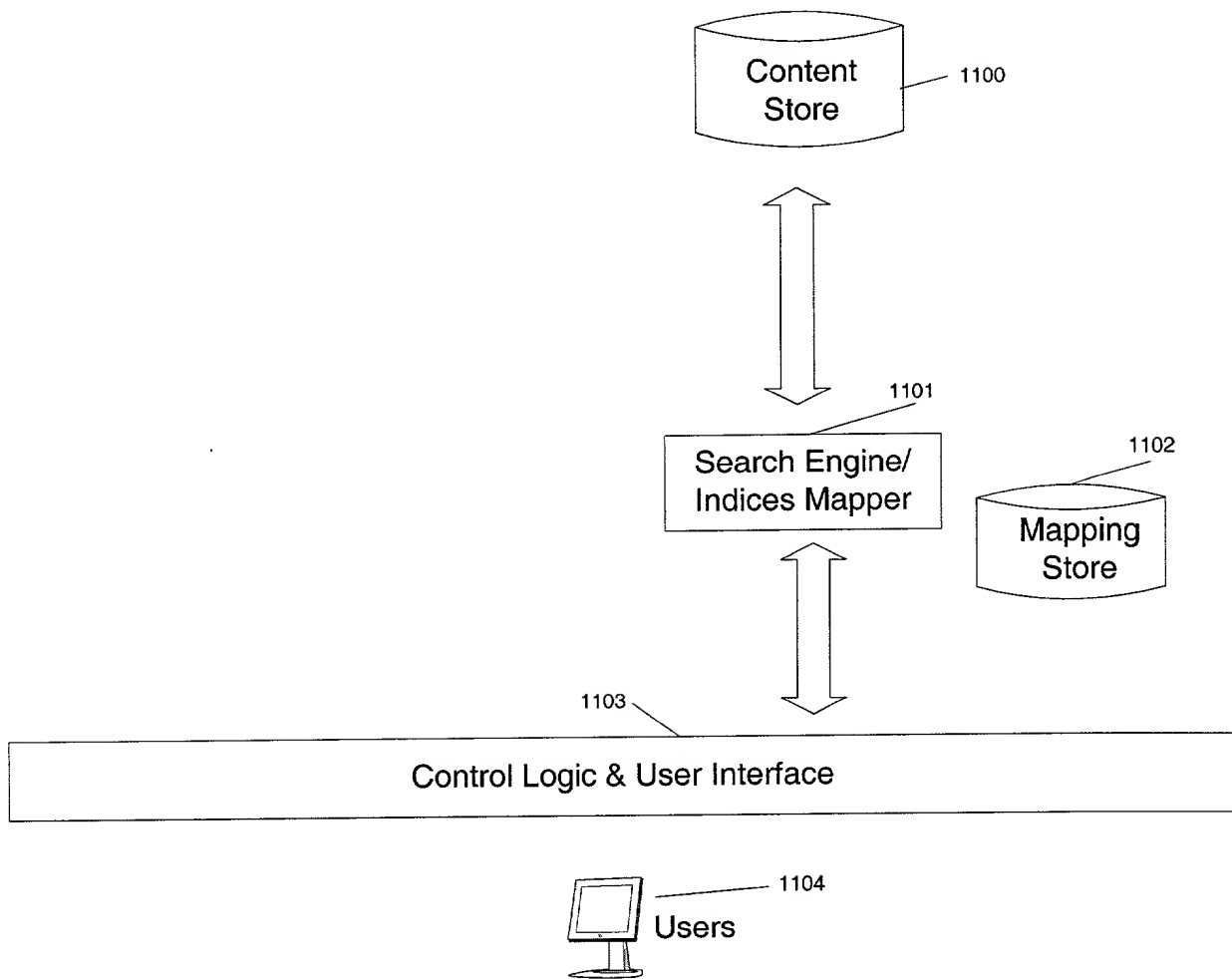


Figure 9

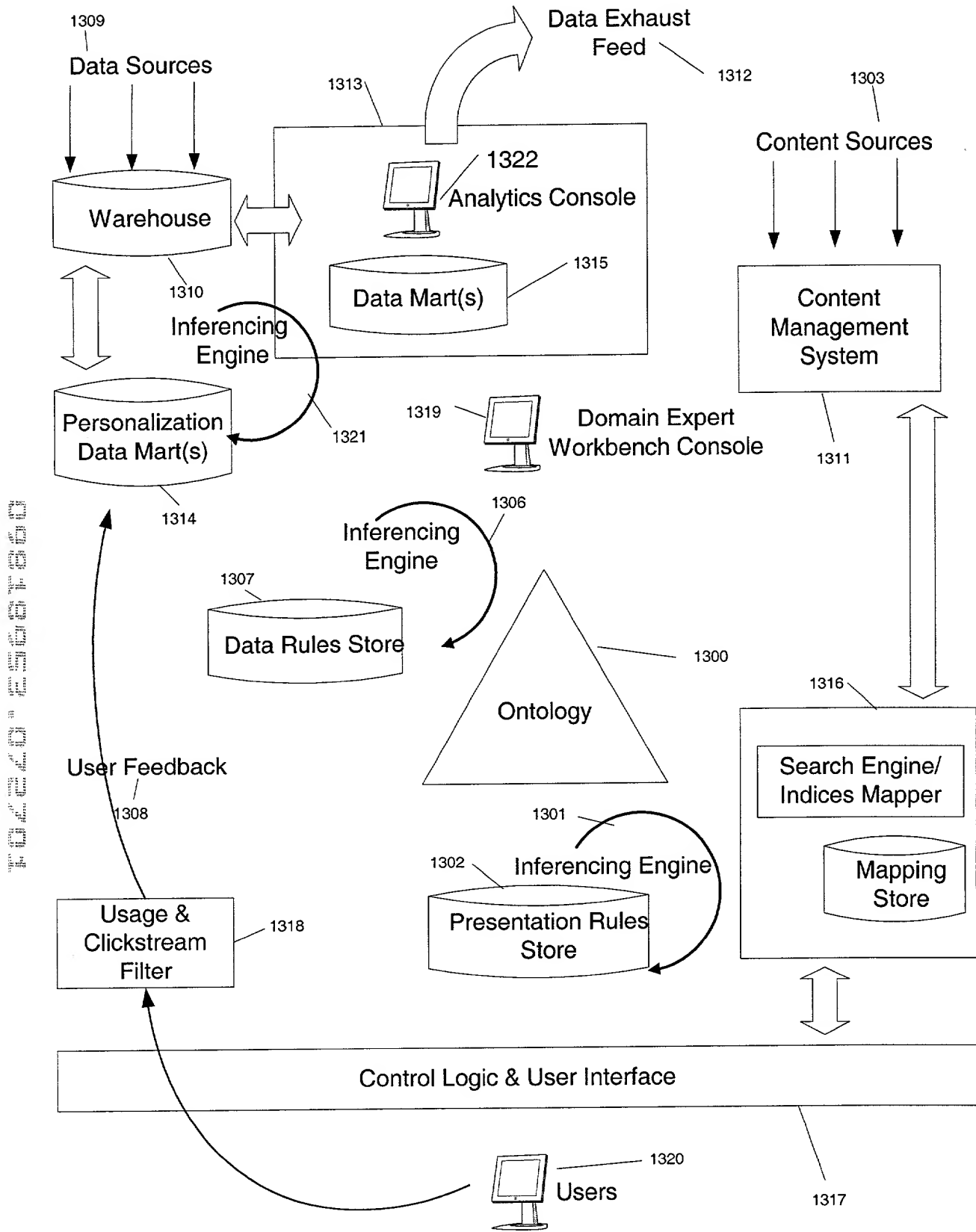


Figure 10

1418 Root node
1419 Gender
1420 male
1421 female
1400 Beverages
1401 Alcoholic
1402 Beer
1403 Wine
1404 Draught
1405 Bottled
1406 Red
1407 White
1408 Mixed Drinks
1409 Non-Alcoholic
1410 Bitter
1411 Stout
1412 Bitter
1413 Lager
1414 Cabernet Sauvignon
1415 Merlot
1416 Chardonnay
1417 Riesling
1418 Root node
1419 Gender
1420 male
1421 female
1422 Coca cola
1423 Champagne
1424 Sam Adams
1425 Boddingtons
1426 Guinness
1427 Murphys
1428 Boddingtons
1429 Boddingtons
1430 Heineken
1431 Budweiser
1432 Spritzer
1433 Sparkling
1434 Champagne

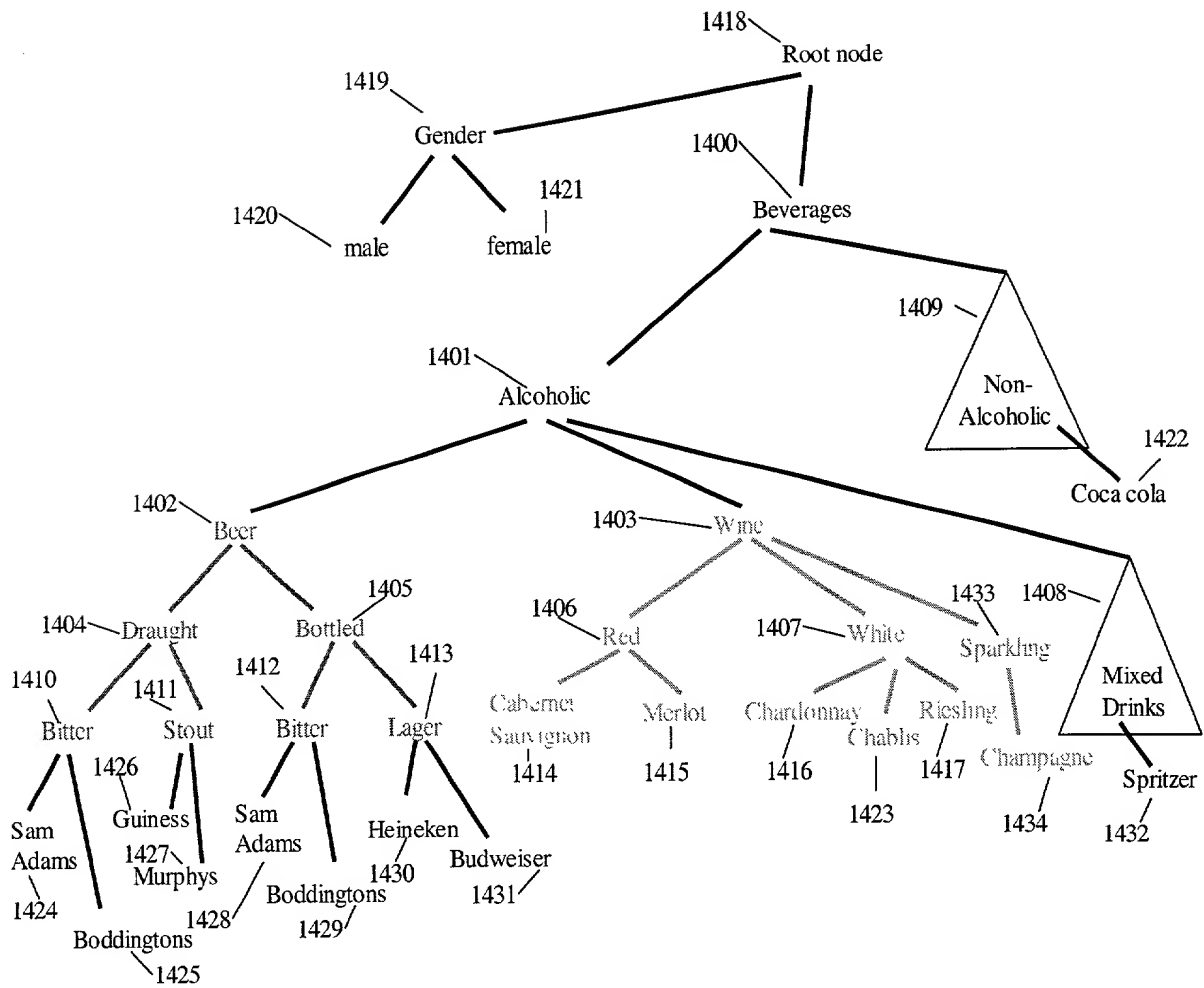


Figure 11

userid	source_data	click_stream	explicit_data
pstirpe	file3542	pstirpe_cs	pstirpe_e
bpinfol	file3542	bpinfol_cs	bpinfol_e
mantico	file3546	mantico_cs	mantico_e
tslavin	file3549	tslavin_cs	tslavin_e
jdoe	file3542	jdoe_cs	jdoe_e

Figure 12

```

<source_data>
  <user>
    <userid>pstirpe</userid>
    <item>
      <source>BeverageClub</source>
      <nodeid>1420</nodeid>
      <label>male</label>
      <date>02/15/01</date>
      <weight>5</weight>
    </item>
    <item>
      <source>BeverageClub</source>
      <nodeid>1410</nodeid>
      <label>Bitter</label>
      <date>02/15/01</date>
      <weight>7.5</weight>
    </item>
    <item>
      <source>BeverageClub</source>
      <nodeid>1413</nodeid>
      <label>Lager</label>
      <date>02/15/01</date>
      <weight>7.5</weight>
    </item>
  </user>
  <user>
    <userid>jdoe</userid>
    <item>
      <source>BeverageClub</source>
      <nodeid>1421</nodeid>
      <label>female</label>
      <date>02/15/01</date>
      <weight>5</weight>
    </item>
    <item>
      <source>BeverageClub</source>
      <nodeid>1413</nodeid>
      <label>Lager</label>
      <date>02/15/01</date>
      <weight>7.5</weight>
    </item>
    <item>
      <source>BeverageClub</source>
      <nodeid>1417</nodeid>
      <label>Riesling</label>
      <date>02/15/01</date>
      <weight>6.5</weight>
    </item>
  </user>
</source_data>

```

Figure 13

```

<ads>
  <ad>
    <title>ad24</title>
    <client>Coca Cola</client>
    <image>image9345.gif</image>
    <clickthru>http://www.coke.com</clickthru>
    <expiredate>01/22/02</expiredate>
    <tags>
      <tag>
        <nodeid>1422</nodeid>
        <label>Coca Cola</label>
        <weight>5</weight>
      </tag>
    </tags>
  </ad>
  <ad>
    <title>ad12</title>
    <client>White's Champagne</client>
    <image>image935.gif</image>
    <clickthru>http://www.wchampagne.com</clickthru>
    <expiredate>01/02/02</expiredate>
    <tags>
      <tag>
        <nodeid>1434</nodeid>
        <label>Champagne</label>
        <weight>6</weight>
      </tag>
    </tags>
  </ad>
</ads>

```

Figure 14

```

<stories>
  <story>
    <title>Best Champagnes from Napa Vally</title>
    <author>J. Pain</author>
    <body>So, you think the best Champagnes are French, Well here are some alternative great
champanges...
    </body>
    <date>03/22/01</date>
    <tags>
      <tag>
        <nodeid>1434</nodeid>
        <label>champagne</label>
        <weight>5</weight>
      </tag>
    </tags>
  </story>
  <story>
    <title>Is there Life after White Wine?</title>
    <author>Jame T. Hathaway</author>
    <body>Although you may love white wine, you may not be considering a wonderful alternative,
namely Champagne...
    </body>
    <date>1/23/01</date>
    <tags>
      <tag>
        <nodeid>1407</nodeid>
        <label>White</label>
        <weight>4</weight>
      </tag>
      <tag>
        <nodeid>1434</nodeid>
        <label>champagne</label>
        <weight>7</weight>
      </tag>
    </tags>
  </story>
</stories>

```

Figure 15

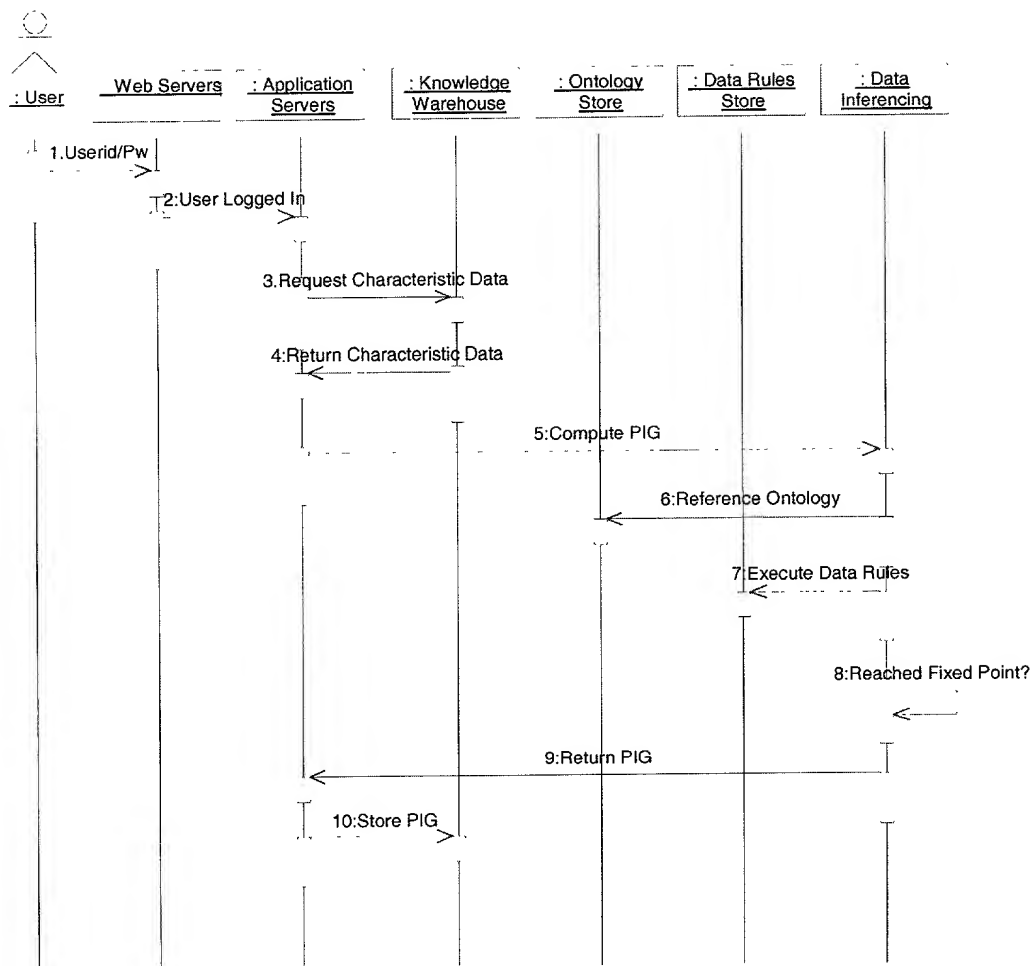


Figure 16

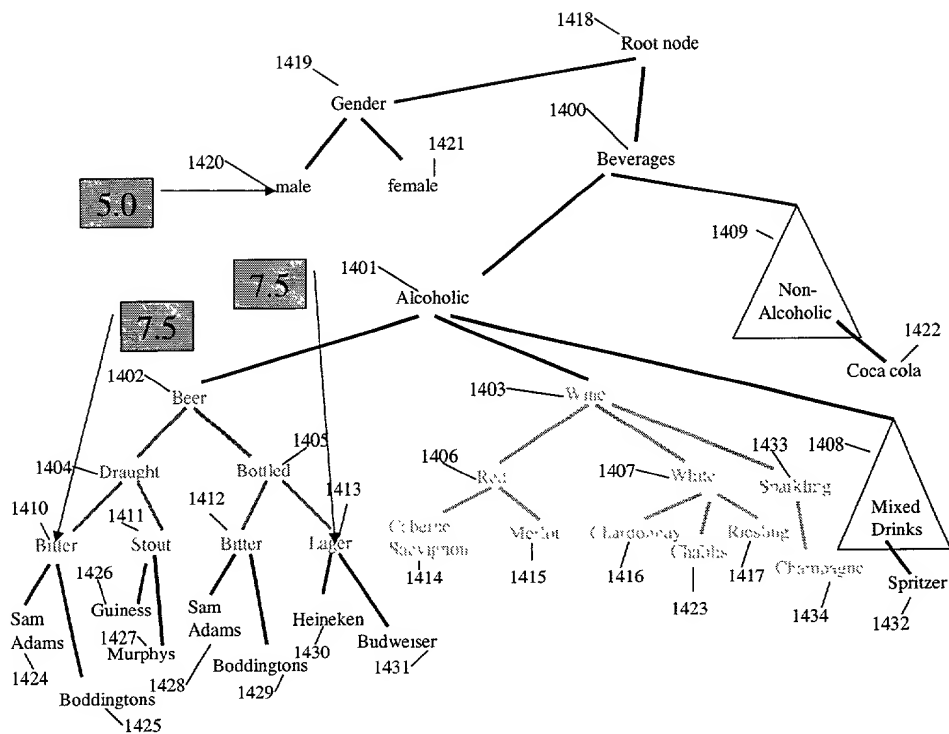


Figure 17

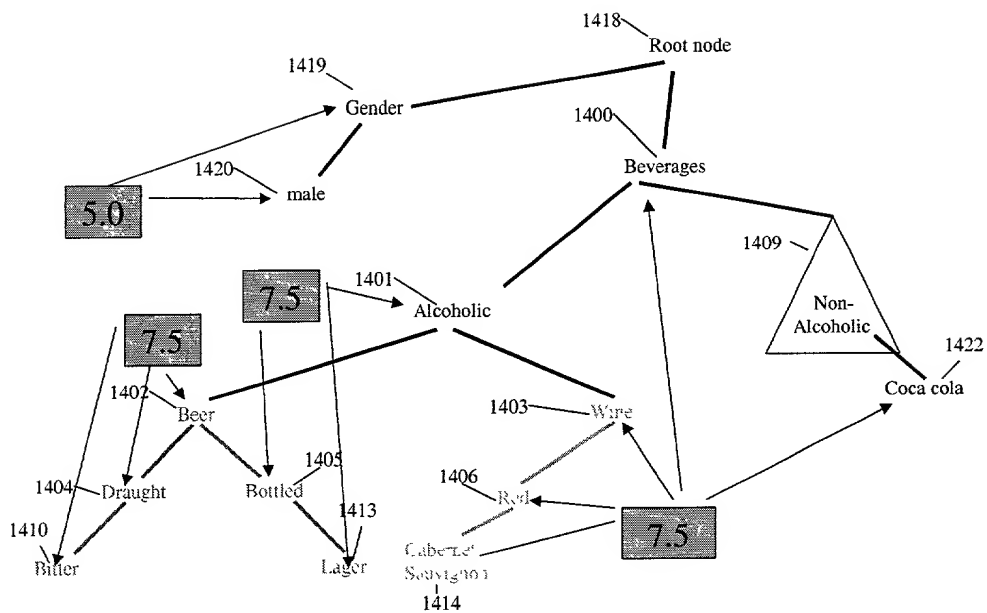


Figure 18

Client IP Address	209.8.45.123	209.8.45.123
User Name	pslrpe	pslrpe
Service Name	Beverages	Beverages
Server Name	bev1	bev1
Server IP Address	205.43.23.19	205.43.23.19
Server Port	80	80
URI Stem	http://www.beverages.com/mybev.jsp/draught/bitter	http://www.beverages.com/mybev.jsp/bottled/bitter
Bytes Sent	45	66
Bytes Received	354	523
Time Taken	450	600
Cookie	39d9ad939gd11343	39d9ad939gd11343
Referer	www.amazon.com/books/peebody.jpg	http://www.beverages.com/mybev.jsp/draught/
bitter		

Figure 19

```
<implicit>
  <clickstream>
    <userid>pstirpe</userid>
    <tags>
      <tag>
        <nodeid>1410</nodeid>
        <label>Bitter</label>
        <date>02/15/01</date>
        <weight>8.5</weight>
      </tag>
      <tag>
        <nodeid>1413</nodeid>
        <label>Bitter</label>
        <date>02/15/01</date>
        <weight>8.5</weight>
      </tag>
    </tags>
  </clickstream>
</implicit>
```

Figure 20

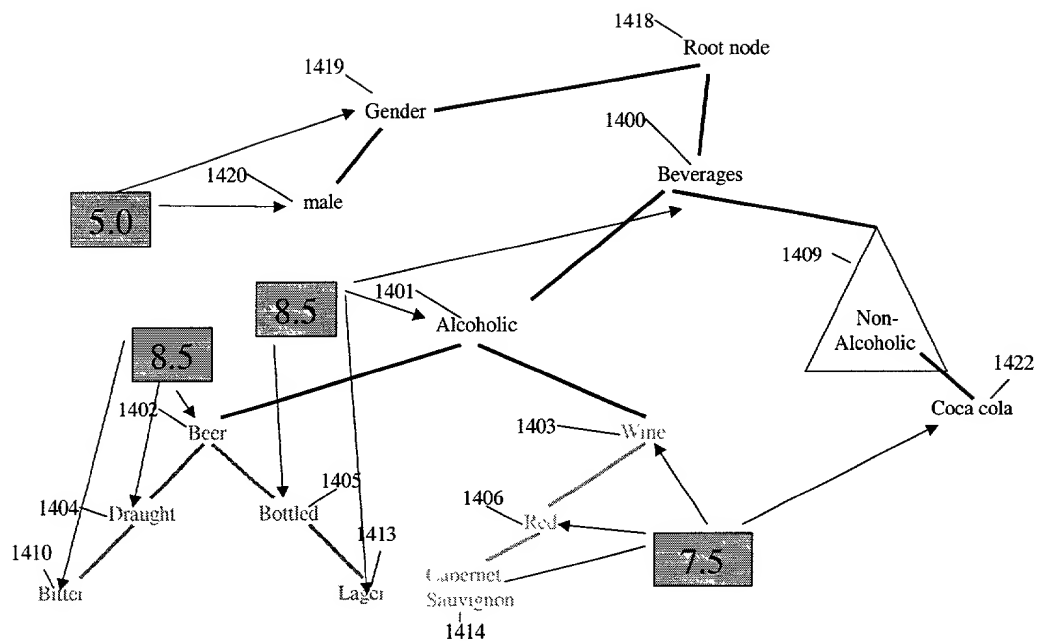


Figure 21

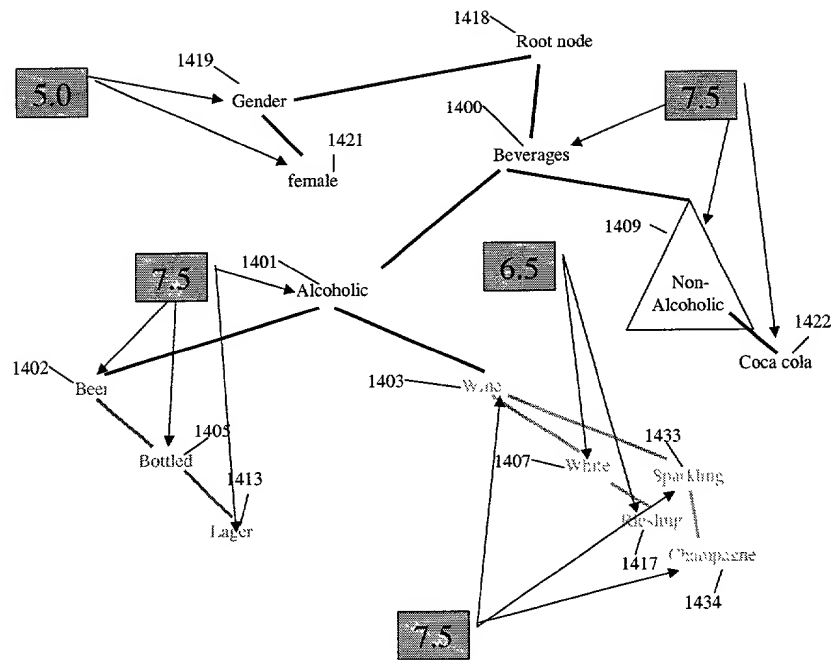


Figure 23

```
<explicit>
<userid>jdoe</userid>
  <tags>
    <tag>
      <nodeid>1425</nodeid>
      <label>Boddingtons</label>
      <date>02/15/01</date>
      <weight>9.5</weight>
    </tag>
  </tags>
</explicit>
```

Figure 24

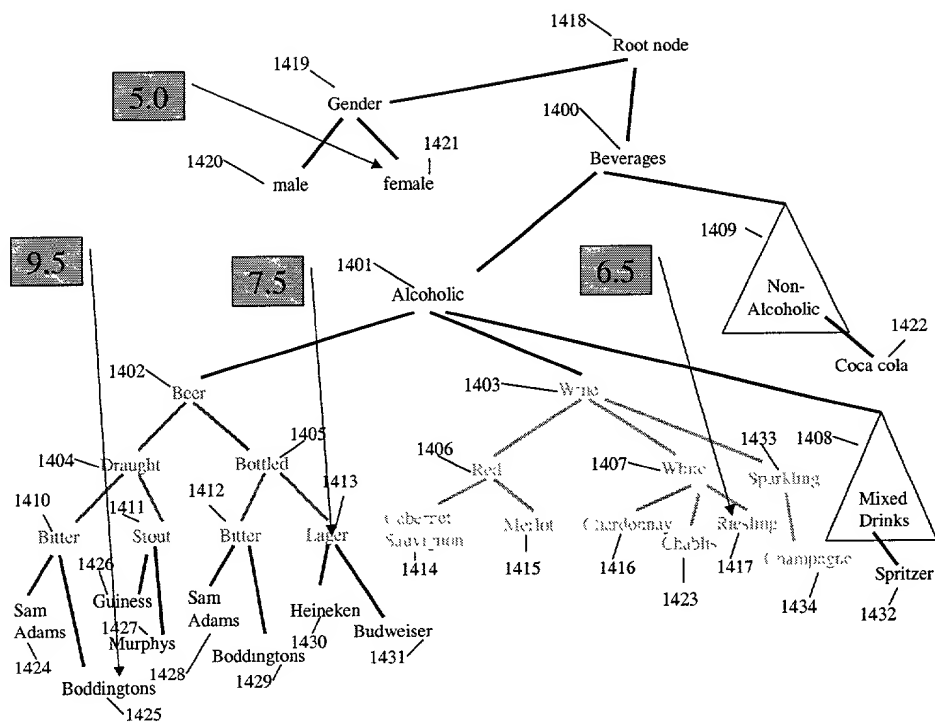


Figure 25

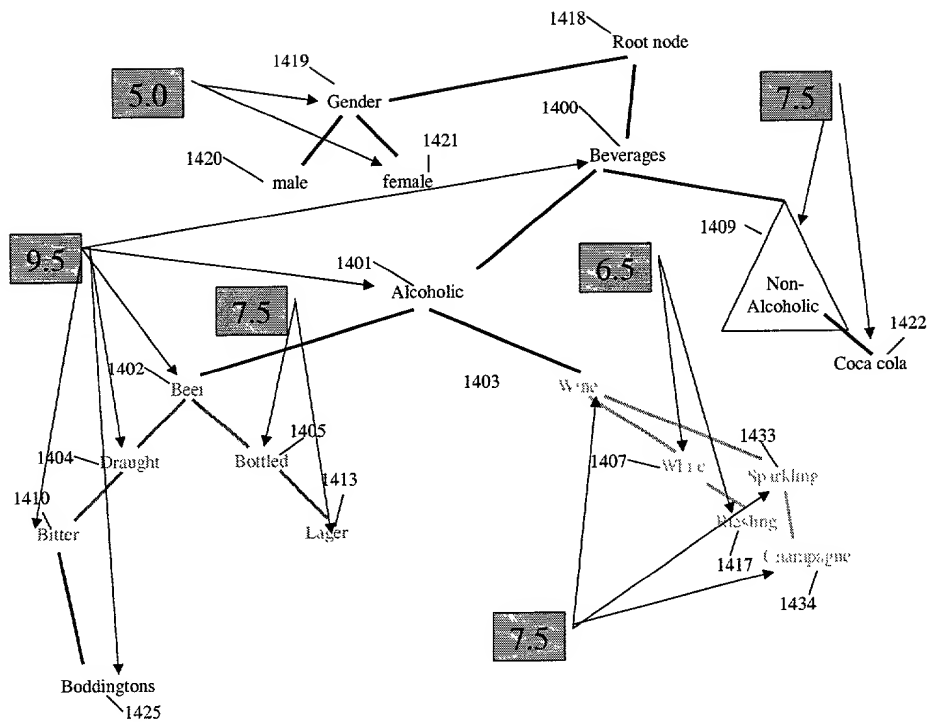


Figure 26

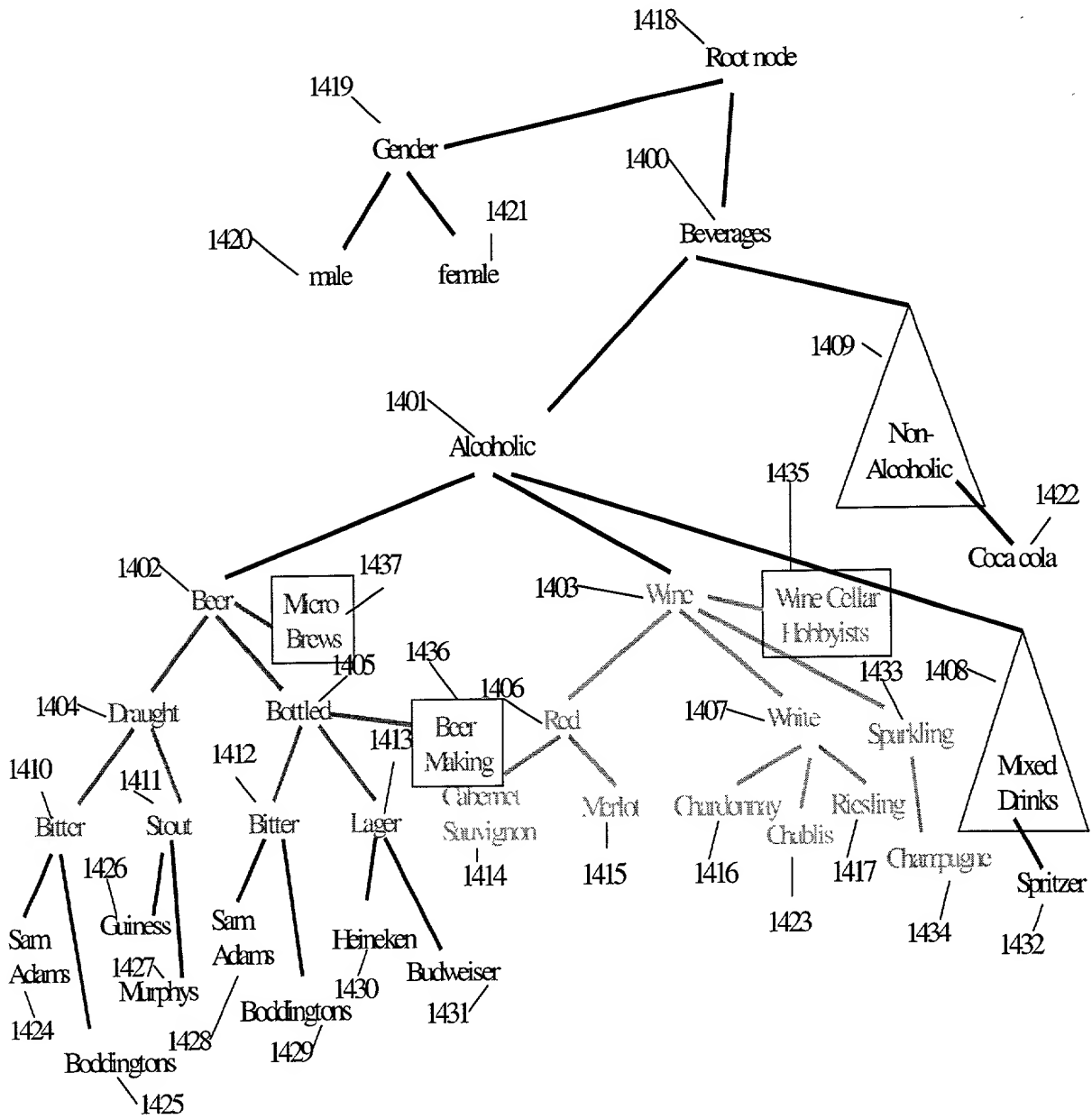


Figure 27